

LETTERS TO THE EDITOR

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Smoking in enclosed shopping centres: employee and public responses to simulated violation

EDITOR,—The last decade has seen a lowering of the Australian community's acceptance of smoking in public places.¹⁻³ International research investigating compliance with smoking restrictions in public places is scarce, however. An Australian study evaluated compliance with legislation introduced in the Australian Capital Territory in 1994.⁴ This study measured the level of compliance by businesses with legislation prohibiting smoking in public places and found that, while only 22% of 938 businesses surveyed complied fully with the signage requirements of the legislation, evidence of smoking occurred in only 5% of the premises reviewed. The study found that successful implementation of non-smoking legislation was facilitated by awareness of the legislation by both customers and business managers, strong public support for the legislation, and targeted information.⁴

A US study examining the degree of compliance with smoke free legislation in retail stores and shopping malls found that compliance by shoppers was linked to the display of no smoking signs and to employees being well informed about the legislation.⁵ A Spanish study found that a warning was given by an employee or member of the community in only 17% of places where a volunteer lit a cigarette in a non-smoking public area.⁶ The presence of signs banning smoking was associated with a greater frequency of warnings.

We sought to evaluate the frequency and nature of reactions to simulated violations of smoking regulations in enclosed shopping

centres in central Sydney, Australia, and two more affluent areas in north and east Sydney in 1998-99.

Shopping centres with an existing non-smoking policy and which were centrally managed were eligible for the study. The simulated breaches of smoking policies involved unobtrusively dressed volunteers lighting a cigarette and allowing it to burn for five minutes. An observer noted the number and type of non-smoking signs and level of activity around the smoker. When a reaction occurred, the type and nature of the reaction was recorded. A multiple logistic regression was performed to identify associations between a reaction and the study factors: area of Sydney, type of signs, level of activity, smoker's age, and sex.

A total of 99 simulations were carried out in 44 shopping centres, 93 of these by female smokers aged in their late 20s. Twenty nine (29%) simulations resulted in a reaction: 5 (5%) were verbal, 18 (18%) were a hostile look, 3 (3%) were abrupt movements away, and 3 (3%) were other types of reactions (for example, fanning of the air). Men and women reacted with equal frequency. The majority of the verbal responses were made by security guards (60%), while customers were more likely to respond with a hostile look rather than a verbal response.

Table 1 shows that the highest rate of reaction occurred in the affluent north Sydney (44%), with 17% and 19% of the simulations occurring in central and eastern Sydney, respectively, resulting in a reaction. A significant trend was found for an increased reaction rate when the centres were busier ($\chi^2 = 4.75$, $p = 0.03$).

The smoking simulations resulted in a low reaction rate, however, with only 5% of the simulations eliciting a verbal warning, although the frequency of reactions increased when the centres were busier. Ideally, the current study would have had more simulations with an even distribution of male and female smokers of differing ages and ethnic background.

The findings of this study support the enforcement of non-smoking policies as a key role for security guards. A security guard approaching a smoker as part of his or her job avoids the power issues associated with members of the community approaching each other in confronting situations. Concurrent strategies that would facilitate enforcement

and remind smokers and non-smokers of the non-smoking norm in enclosed shopping centres could include public address reminders for shoppers, more prominent signage, and education of staff regarding the non-smoking policies and procedures.

The acceptability of smoking in enclosed public places has been steadily decreasing, as evidenced by the high proportion of such places with non-smoking policies, although the public appears reluctant to act when confronted by violations to these policies. In light of other research in this area which has shown very low rates of verbal responses from non-smokers when second hand smoke is found harmful and annoying,⁷ the low rate of reactions in this study are not surprising. To some extent this may result from the perceived "easy going" Australian nature or a reluctance to engage in potentially confronting situations. It may also be due to a lack of knowledge about what appropriate action to take owing to the relative rarity of seeing someone engaging in smoking in a non-smoking area in Australia.

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Tobacco education in Cairo, Egypt: is there an effect on adolescent smoking?

EDITOR,—As cigarette consumption in the US has fallen, and tobacco companies have come under criticism for allegedly targeting youth in their advertising, many companies have focused more on overseas markets to maintain their profits. Egypt, with the highest tobacco consumption in the Arab world, appears to be a lucrative market for cigarette manufacturers. While adult cigarette consumption is declining or stagnant in the US, it is growing in Egypt at a rate of 4-5% a year.¹ In the US smoking typically starts during adolescence: 89% of daily smokers tried their first cigarette on or before age 18 years,

Table 1 Reaction to smoking in a non-smoking shopping centre by explanatory variables (n = 99 simulations)

Explanatory variables	Number of simulations (n = 99)	Simulations resulting in reactions (%)	Unadjusted OR	95% CI	Adjusted OR	95% CI
Venue						
Shopping centre (CS)	29	5 (17%)	1.00			
Shopping centre (NS)	43	19 (44%)	3.85	1.22-12.50	9.09	1.92-50.00
Shopping centre (ES)	27	5 (19%)	1.09	0.28-4.35	1.75	0.27-11.11
Signs						
No signs	64	20 (30%)	1.00			
Worded	4	1 (25%)	0.37	0.03-4.35	0.23	3.33-0.02
Worded and symbols	31	8 (26%)	0.39	0.13-1.14	0.44	0.12-1.56
Activity						
Quiet	11	2 (18%)	1.00			
Moderate	57	13 (23%)	1.33	0.25-7.14	0.92	0.14-6.25
Busy	31	14 (45%)	3.70	0.68-20.00	3.23	0.43-25.00
Smoker's age						
20-25 years	50	18 (36%)	1.00			
>25 years	49	11 (22%)	0.52	0.21-1.25	0.19	0.06-0.64
Smoker's sex						
Male	6	2 (33%)	1.00			
Female	93	27 (29%)	0.82	0.14-4.76	0.10	0.00084-1.14

CS, central Sydney; NS, northern Sydney; ES, eastern Sydney.

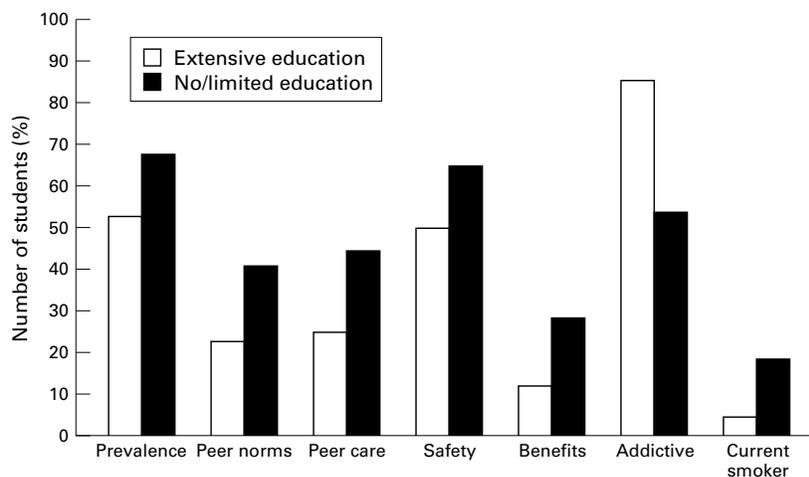


Figure 1 Effectiveness of tobacco health education class on related knowledge, attitudes, beliefs, and smoking behaviour.

and 71% of those who have ever smoked daily have also initiated smoking by 18.² This trend appears to hold true in Egypt as well: the modal age for onset of smoking is 14–15 years old.³ The purpose of our survey was to examine the level of tobacco education in Egyptian schools and to determine whether exposure to the health risks of tobacco is related to smoking prevalence.

Mr Mohamed Helmi Abd Raboh, an inspector general in the Egyptian Ministry of Education, conducted a survey of secondary students (ages 14–18 years) to obtain information on both the prevalence of adolescent smoking in Egypt and the level of student knowledge of tobacco health risks. The survey was conducted in 1998 on a convenience

sample of 302 students from Cairo and the surrounding cities of Giza and Kalyoub.

The overall prevalence of current smoking was 8.3%, with significant sex differences (13.2% males, 3.3% females). Important predictors of current smoking were peer norms, perceived benefits of smoking, and knowledge that smoking is addictive. Furthermore, exposure to extensive education on the health risks of smoking was the most important predictor of knowledge of addiction. The effect of an extensive school tobacco education is shown in fig 1. For each risk factor and smoking behaviour, having an extensive tobacco health education had a beneficial effect.

Most of the Egyptian students surveyed in this study reported having some level of

tobacco education, yet there was great variability in the extent of this education among the respondents. It appears that education on tobacco risk has an indirect role on smoking prevalence among Egyptian adolescents. Tobacco education was shown to be the most important factor in determining the students' knowledge that smoking is addictive, while this knowledge was the strongest predictor of whether or not the students were current smokers. Efforts to standardise educational outreach between males and females, in addition to increasing the level of exposure to information on the health risks of smoking, may help diminish the smoking prevalence among Egyptian adolescents.

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